

# UPDATE ON THE SAFETY ASSURANCE SYSTEM

## WHAT WE'VE LEARNED ABOUT SAS

STORY BY LINDSEY MCFARREN

If your Part 121, 135 or 145 organization hasn't been SAS'd yet, you probably will be soon.

In January 2017, *Avionics News* published an article summarizing the safety assurance system concept. SAS is essentially a new method of oversight, meant to provide aviation safety inspectors with standards protocols to evaluate certificate holders or new applicants. Design assessments and performance assessments are the core tools of SAS. Design assessments verify an organization's systems are designed to comply with regulations. Performance assessments are used to determine if those systems are producing the intended results.

SAS applies to Part 121, 135 and 145 applicants and certificate holders and separates these entities into peer groups. For example, a Part 145 repair station within the U.S. is peer group F. Other Part 145 repair stations are peer group G or H. Different requirements are set for each peer group.

For the certificate holder or applicant, the primary interaction with SAS at this point seems to be through data collection tools, checklists which verify the entity's system meets regulatory requirements and addresses the six safety attributes of SAS:

- Responsibility.
- Authority.
- Procedures.
- Controls.
- Process measurements.
- Interfaces.

The basic goal of SAS is to improve safety in operations by:

1. Defining detailed processes to help ensure consistent results and determining who is responsible and accountable for those results.
2. Proactively identifying possible instances of regulatory noncompliance or safety concerns by implementing controls (checklists, for example) and process measurements.

3. Developing and implementing corrective actions to mitigate risks.

Do some of those concepts sound similar to safety management system concepts? They should. Many SAS and SMS concepts overlap.

Here's what we've learned about SAS as its implementation has spread:

1. Some requirements might surprise you.

In explaining SAS, the Federal Aviation Administration claims it is "not a separate safety standard and does not impose additional requirements on certificate holders." If you are a Part 135 operator, you might take exception with that statement. For example, the SAS DCTs require Part 135 operators to report to their FSDO within five days any instances of drunken passengers. There is no correlating Part 135 regulation requiring this report. (There is, however, a similarly worded requirement in Part 121.) While I haven't reviewed every DCT for every peer group, I'm sure you will identify similar quirks in your assigned DCTs.

The DCTs require a selection of yes, no, or not applicable, as to whether your organization complies with each DCT checklist item, and then a reference or comment about how you comply. Unfortunately, there's only one "right" answer: yes. According to Flight Standards Information Management System guidance, "no" may be appropriate but my experience with DCTs says "no" just provides an opportunity for improvement of your policies and procedures. "Not applicable" basically means not acceptable. While you might be tempted to mark an item that is not clearly required by regulation "not applicable," that approach is unlikely to work.

2. DCTs can and will change – often.

The DCTs also change with some regularity. The manual you write or adapt to comply with DCTs today

might no longer comply in six months or a year.

3. SAS is often "your homework" – which isn't necessarily a bad thing.

Leaders of the FAA, including John Duncan, executive director of Flight Standards Services, have said publicly and often that DCTs are inspector homework, not your homework. This hasn't been the experience of most applicants or certificate holders

I've talked with. In fact, only a few certificate holders told me their inspectors complete the DCTs, usually by visiting the operator once a month with a couple of checklists at each visit.

However, completing the DCTs yourself isn't necessarily a bad thing. Although the hundreds of pages of checklists add to what is your likely overflowing plate of tasks, the exercise can be beneficial.

First, completing the DCTs gives you an opportunity to revise your policies and procedures in order to comply with the DCTs without your inspector asking you to do so.

Second, if your inspectors complete the checklists, you might have more frequent FAA visits than in the past. It seems more convenient to do the DCTs on your schedule rather than making time for more frequent inspector meetings.

Finally, by completing the DCTs, you tell the inspector exactly where in your policies and procedures the DCT standard is addressed. Although you will spend some time locating each reference, it saves your task-saturated inspectors hours of effort, which they will hopefully use to work on some other task beneficial to your organization instead of searching through checklists. This is most helpful for certificate applicants requesting new certificates or certificate holders requesting complex or significant new authorizations.

**THERE DOESN'T SEEM TO BE ANY WAY TO HIDE FROM OR AVOID SAS. IF IT HASN'T TOUCHED YOUR PART 121, 135 OR 145 ORGANIZATION YET, IT WILL EVENTUALLY.**

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4. The SAS portal is alive and well and makes it even more likely to be your homework.

The FAA recently rolled out its SAS external portal, usually referred to as the SAS portal or just the portal. Implementation levels still vary from one Certificate Management Office or Flight Standards District Office to another, with some inspectors using the portal only for new certificate candidates and others introducing the portal to all the certificated entities under their oversight.

The portal is a web-based application for certificate holders and applicants operating under Parts 121, 135 and 145 to communicate directly with their FSDO or CMO. It is essentially a communications and document repository, allowing the certificate holder or applicant and the FAA office with oversight of that entity to view

**DESIGN ASSESSMENTS AND PERFORMANCE ASSESSMENTS ARE THE CORE TOOLS OF SAS. DESIGN ASSESSMENTS VERIFY AN ORGANIZATION'S SYSTEMS ARE DESIGNED TO COMPLY WITH REGULATIONS. PERFORMANCE ASSESSMENTS ARE USED TO DETERMINE IF THOSE SYSTEMS ARE PRODUCING THE INTENDED RESULTS.**

documents related to that certificate holder or applicant in one location.

The portal also houses all the DCTs assigned to the certificate holder or applicant. In some cases, your inspectors will provide portal access and ask you to

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complete the DCTs through the portal. If the DCTs are going to be your homework, the portal is the

best way to go. Before the portal, inspectors printed hundreds of pages of DCTs or emailed dozens of PDFs containing DCTs. The certificate holder or applicant completed the checklists by hand or in PDF editors, then returned the checklists to the

inspectors who then had to process them internally. The portal makes this process much more efficient.

On a side note, if you've tried to get ahead by filling out the DCTs for your peer group available on FSIMS, you've probably noticed a good number of questions don't apply to your operation. The portal contains DCTs generated specifically for your certificate and operations specifications. If you aren't on the portal yet, your inspector can generate certificate-specific DCTs and send them as PDFs.

5. The portal is a little glitchy.

The portal is not without its glitches. Users report it runs slowly, even with fast internet connections, and it tends to log users out after periods of portal-determined inactivity. You might, in fact, have been active during these periods. Here's a word to the wise – save your work often!

In theory, it seems the portal can speed up the certification process for a new applicant or new authorizations or approvals for current certificate holders. The choke point in the system, though, is the fact an FAA inspector still must review the submissions. While some of the legwork of SAS is being done by the applicant or certificate holder, you will have to wait for the usually over-tasked inspector to find time for your project.

There doesn't seem to be any way to hide from or avoid SAS. If it hasn't touched your Part 121, 135 or 145 organization yet, it will eventually. Look over the guidance available in FSIMS and elsewhere so you are familiar with the concepts and process before your inspectors come knocking. □

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